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## Reflecting Figures

1. Create the class rule for reflecting a figure over the $y$-axis.

Reflect the following figures over the y-axis. List the coordinates of the pre-image and the coordinates of the image points.
2.


Pre-Image Points:
3.


Pre-Image Points:
4. Create the class rule for reflection a figure over the $x$-axis.

Reflect the following figures over the x-axis. List the coordinates of the pre-image and the coordinates of the image points.
5.


Pre-Image Points:
6.


Pre-Image Points:

Image Points

# Rules for Reflections 

## Reflection over the x-axis

Describe in words:

Create using math symbols:

## Reflection over the $y$-axis

Describe in words:

Create using math symbols:

1. Triangle $A B C$ is reflected over the x-axis. Apply the appropriate rules above or the graph to the right to give the image points for triangle $A^{\prime} B^{\prime} C^{\prime}$.
$A^{\prime}\left(, \quad B^{\prime}(, \quad) \quad C^{\prime}(, \quad)\right.$
2. Triangle $A B C$ is reflected over the $y$-axis. Apply the appropriate rule above or the graph to right to give the image points for triangle $A^{\prime} B^{\prime} C^{\prime}$.
$A^{\prime}(, \quad)$
$B^{\prime}($
C'


In 3-10, pre-image coordinate points are given. Identify the image of each point under the given reflection.

## Reflection over the x-axis.

3. $(-1,-9) \rightarrow$
4. $(7,-6) \rightarrow$
5. $(-2,2) \rightarrow$
6. $(10,3) \rightarrow$

Reflection over the y-axis.
7. $(5,-5) \rightarrow$
8. (-1, -9) $\rightarrow$
9. $(-2,2) \rightarrow$
10. $(10,3) \rightarrow$

